

Presentation - Semi-automated Estimation of Reliability Measures from Maintenance Work Order Records



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Title

Semi-automated Estimation of Reliability Measures from Maintenance Work Order Records

Abstract

Determining mean-time-between-failure (MTBF) estimation for in-service assets is an essential process. Statistical distributions of end-of-life values are used to assess asset reliability performance and the effectiveness of maintenance strategy. However, identifying the end-of-life event for each instance of functional failure is an arduous, manual process dependent on structured and unstructured fields in the maintenance management system and rules used by individual reliability engineers. In this work, a technical language processing (TLP) pipeline is developed to produce MTBF values for in-service assets from maintenance work order data. Using this pipeline, we investigate how undocumented decisions made by reliability engineers in identifying end-of-life events impact MTBF estimates.